Silo Blockage Identifier

Identify the 7 most common types of grain buildup

Grain and bulk commodities do not always flow freely. Over time, material can pack, bridge, or harden inside a bin or silo, restricting flow and creating safety and capacity problems. Use this guide to identify what you are dealing with. Every one of these can be cleared from outside the structure by a trained crew, no bin entry required.

Ratholing

HOW TO SPOT IT
Grain empties through a narrow vertical channel above the outlet while material stays packed against the walls.

WHY IT'S A PROBLEM
Reduces usable capacity and hides pockets of old or spoiling grain along the walls.

HOW IT'S CLEARED
A grain vacuum or bin whip removes the packed material clinging to the bin walls.

Funneling

HOW TO SPOT IT
Only the grain directly above the outlet flows out, leaving a cone-shaped depression and stagnant material around it.

WHY IT'S A PROBLEM
Older grain sits unused on the sides, raising spoilage and cross-contamination risk.

HOW IT'S CLEARED
Wall material is loosened and vacuumed out to restore full, even flow.

Bridging

HOW TO SPOT IT
A hardened crust forms an arch across the bin, leaving a hollow gap underneath after grain is drawn down.

WHY IT'S A PROBLEM
The bridge can collapse without warning, a leading cause of engulfment during manual entry.

HOW IT'S CLEARED
The crust is broken up remotely with a bin whip and cleared with a vacuum, never by walking on it.

Doming

HOW TO SPOT IT
A dome of compacted grain forms directly over the outlet and stops material from dropping through.

WHY IT'S A PROBLEM
Blocks discharge entirely and tempts workers to enter and dig, which is extremely dangerous.

HOW IT'S CLEARED
A crew breaks the dome from outside using a bin whip, then vacuums the loosened grain.

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Caking

HOW TO SPOT IT
Spoiled or moisture-damaged grain hardens and sticks to the bin walls in thick, crusted layers.

WHY IT'S A PROBLEM
Caked grain harbors mold and pests and can restrict flow as layers thicken over time.

HOW IT'S CLEARED
Layers are scraped loose with a bin whip and removed with a high-volume grain vacuum.

Plugging

HOW TO SPOT IT
A solid mass of compacted or frozen material jams the outlet or discharge cone, stopping all flow.

WHY IT'S A PROBLEM
Brings unloading to a halt and can put dangerous asymmetrical pressure on the structure.

HOW IT'S CLEARED
The plug is broken up remotely and vacuumed out, clearing the outlet without entry.

Buildup

HOW TO SPOT IT
General accumulation of grain, dust, and residue coats the interior surfaces, floor, and ledges.

WHY IT'S A PROBLEM
Feeds dust explosion risk, hides corrosion, and steadily eats into storage capacity.

HOW IT'S CLEARED
Routine professional cleaning with vacuums and whips clears surfaces and restores capacity.

Never enter a bin to clear a blockage.

Flowing or collapsing grain can trap a person in seconds, and about 36% of reported grain entrapments are fatal (OSHA). Every blockage above can be cleared from outside the structure. If material has stopped flowing, stop and call a professional crew.

Dealing with a blockage or buildup? West Side Salvage cleans and unclogs bins nationwide.

Schedule a cleaning: westsidesalvage.com/maintenance/cleaning/ | Call 844-246-2234